

U.S. Patent Application Serial No. 10/769,565
Docket No. 59419-010102

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0024] with the following paragraph:

[0024] According to a ninth aspect, a method for controlling a flavivirus entry into a cell is disclosed, the flavivirus exhibiting a flavivirus envelope protein, the flavivirus envelope protein comprising a domain III, the method comprising administering to the cell an agent functionally interfering with the domain III of the flavivirus envelope protein. Preferably the domain III of the virus comprise a portion having a sequence substantially homologous to SEQ ID NO: [19]20 or SEQ ID NO: 21.

Please replace paragraph [0028] with the following paragraph:

[0028] According to a further aspect, a method for inducing immunity to a flavivirus in a vertebrate susceptible to the infection of the flavivirus is disclosed, the flavivirus exhibiting an envelope protein comprising a domain III. The method comprises administering to the vertebrate an immunogenic amount of a polypeptide comprising the domain III, of the envelope protein of the flavivirus, preferably comprising a portion substantially homologous to SEQ ID NO: [19]20 or SEQ ID NO: 21.

Please replace paragraph [00108] with the following paragraph:

[00108] A method for inducing immunity to a flavivirus in a vertebrate susceptible to infection to the flavivirus is also disclosed. In particular, the method is effective for immunizing against infection to a flavivirus having an envelope protein comprising the domain III and comprises administering an immunogenic effective amount of an amino acid molecule comprising a domain III of the envelope protein of the flavivirus. Preferably, the domain III comprises a portion having a sequence substantially homologous to SEQ ID NO: [19]20 or SEQ ID NO: 21.

Please replace paragraph [00109] with the following paragraph:

[00109] Accordingly, also a vaccine for flavivirus infection is disclosed, comprising, as an active agent, a polypeptide comprising domain III of the envelope protein of the flavivirus. When the

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flavivirus is West Nile Virus, the polypeptide preferably comprise a portion having a sequence substantially homologous to SEQ ID NO: [19]20 or SEQ ID NO: 21.

Please replace paragraph [00237] with the following paragraph:

[00237] The amino acid sequence of domain III coded by the sequence reported as SEQ ID NO: 20 is designated as SEQ ID NO: 21. A soluble form of recombinant domain III from 350 to 390 of the envelope protein of West Nile virus envelope protein (E protein) was cloned into E. Coli expression vector pET16b (Novogen, USA) and expressed as His-tagged fusion protein. The protein had comprised a sequence reported in the sequence listing as SEQ ID NO: [19]20. The DIII protein was able to be expressed as a soluble protein. Recombinant DIII protein was separated by 10%SDS PAGE and followed by transferring to nitrocellulose membrane. The recombinant DIII is detected with monoclonal antibodies against E protein of WNV and anti-His antibodies. The results are shown in Figure 22.